

WHAT IS CLAIMED IS:

1 1. For use in a wireless network, a method of providing
2 quality-of-service (QoS) functions to a mobile station accessing
3 the wireless network, the method comprising the steps of:

4 receiving from the mobile station a packet data call
5 initiation signal;

6 sending an authorization request corresponding to the
7 mobile station;

8 receiving an authorization message and quality-of-service
9 profile corresponding to the mobile station;

10 receiving application information corresponding to the
11 mobile station; and

12 determining quality-of-service parameters according to
13 the quality-of-service profile and the application information,
14 wherein the mobile station thereafter communicates according to the
15 quality-of-service parameters.

1 2. The method of claim 1, wherein the packet data call
2 initiation signal is received in a base station controller.

1 3. The method of claim 1, wherein the quality-of-service
2 profile is stored on an authorization server.

1 4. The method of claim 1, wherein the quality-of-service
2 parameters are sent to a packet data serving node.

1 5. The method of claim 1, wherein the application
2 information includes an application data class.

1 6. The method of claim 1, wherein the quality-of-service
2 profile includes delay, maximum data rate, and data loss rate
3 information.

1 7. The method of claim 1, wherein quality-of-service
2 parameters are determined by a quality-of-service control
3 component.

1 8. A call management system comprising:

2 a QoS controller capable of receiving from a mobile
3 station a packet data call initiation signal and sending an
4 authorization request corresponding to the mobile station to an
5 authorization server, wherein the QoS controller receives from the
6 authorization server an authorization message and quality-of-
7 service profile corresponding to the mobile station, and wherein
8 said QoS controller is further capable of receiving application
9 information corresponding to the mobile station, determining
10 quality-of-service parameters according to the quality-of-service
11 profile and the application information, and transmitting a control
12 message to the mobile station capable of causing the mobile station
13 to communicate thereafter according to the quality-of-service
14 parameters.

1 9. The call management system of claim 8, wherein the QoS
2 controller is a part of a base station controller.

1 10. The call management system of claim 8, wherein the
2 quality-of-service profile is stored on an authorization server.

1 11. The call management system of claim 8, wherein the
2 quality-of-service parameters are sent to a packet data serving
3 node.

1 12. The call management system of claim 8, wherein the
2 application information includes an application data class.

1 13. The call management system of claim 8, wherein the
2 quality-of-service profile includes delay, maximum data rate, and
3 data loss rate information.

1 14. The call management system of claim 8, wherein the QoS
2 controller determines the quality-of-service profile using a
3 quality-of-service control component.

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1 15. A wireless network comprising:

2 a plurality of base station capable of communicating with
3 a plurality of mobile station, wherein at least one of the
4 plurality of base stations comprises:

5 a QoS controller capable of receiving from a mobile
6 station a packet data call initiation signal and sending an
7 authorization request corresponding to the mobile station to
8 an authorization server, wherein the QoS controller receives
9 from the authorization server an authorization message and
10 quality-of-service profile corresponding to the mobile
11 station, and wherein said QoS controller is further capable of
12 receiving application information corresponding to the mobile
13 station, determining quality-of-service parameters according
14 to the quality-of-service profile and the application
15 information, and transmitting a control message to the mobile
16 station capable of causing the mobile station to communicate
17 thereafter according to the quality-of-service parameters.

1 16. The wireless network of claim 15, wherein the QoS
2 controller is a part of a base station controller.

1 17. The wireless network of claim 15, wherein the quality-of-
2 service profile is stored on an authorization server.

1 18. The wireless network of claim 15, wherein the quality-of-
2 service parameters are sent to a packet data serving node.

1 19. The wireless network of claim 15, wherein the application
2 information includes an application data class.

1 20. The wireless network of claim 15, wherein the quality-of-
2 service profile includes delay, maximum data rate, and data loss
3 rate information.

1 21. The wireless network of claim 8, wherein QoS controller
2 determines the quality-of-service profile using a quality-of-
3 service control component.